DEPARTMENT OF ENERGY

[Case Number 2022-002, EERE-2017-BT-WAV-0027]

Energy Conservation Program: Extension of Interim Waiver to AHT Cooling Systems

GmbH and AHT Cooling Systems USA Inc. from the Department of Energy Commercial

Refrigerator, Freezer, and Refrigerator-Freezer Test Procedure

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notification of extension of interim waiver.

SUMMARY: The U.S. Department of Energy ("DOE") is granting an interim waiver extension (Case No. 2022-002) to AHT Cooling Systems GmbH and AHT Cooling Systems USA Inc. ("AHT") from specified portions of the DOE Commercial Refrigerators, Freezers, and Refrigerator-Freezers (collectively "commercial refrigeration equipment" or "CRE") test procedure for determining the energy consumption of the specified AHT CRE basic models. Under this extension, AHT is required to test and rate the specified basic models in accordance with the alternate test procedure specified in the interim waiver.

DATES: The Extension of Interim Waiver is effective on [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

FOR FURTHER INFORMATION CONTACT: Ms. Julia Hegarty, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. E-mail: AS_Waiver_Requests@ee.doe.gov.

Mr. Pete Cochran, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC-33, Forrestal Building, 1000 Independence Avenue SW., Washington, DC 20585-0103. Telephone: (202) 586-9496. Email: peter.cochran@hq.doe.gov.

SUPPLEMENTARY INFORMATION: In accordance with Title 10 of the Code of Federal Regulations (10 CFR 431.401(g)), DOE gives notice of the issuance of an Extension of Interim

Waiver as set forth below. The Extension of Interim Waiver extends the Interim Waiver granted to AHT on May 26, 2017 (82 FR 24330, "May 2017 Interim Waiver") to include the AHT basic models specified in this interim waiver extension, as requested by AHT on January 20, 2022. AHT must test and rate the specifically identified CRE basic models in accordance with the alternate test procedure specified in the May 2017 Interim Waiver. AHT's representations concerning the energy consumption of the specified basic models must be based on testing according to the provisions and restrictions in the alternate test procedure set forth in the May 2017 Interim Waiver, and the representations must fairly disclose the test results. Distributors, retailers, and private labelers are held to the same requirements when making representations regarding the energy consumption of this equipment. (42 U.S.C. 6314(d))

DOE makes decisions on waiver extensions, including interim waiver extensions, for only those basic models specifically set out in the request, not future models that may be manufactured by the petitioner. AHT may submit a new or amended petition for waiver and request for grant of interim waiver, as appropriate, for additional basic models of CRE. Alternatively, if appropriate, AHT may request that DOE extend the scope of a waiver or interim waiver to include additional basic models employing the same technology as the basic models set forth in the original petition consistent with 10 CFR 431.401(g).

_

¹ AHT's request is available at https://www.regulations.gov/document/EERE-2017-BT-WAV-0027-0017. The specified basic models are: IBIZA 145 (U) NAM1-IC, IBIZA 210 (U) NAM1-IC, MALTA 185 (U) NAM1-IC, MANHATTAN XL 210 (U) NAM1-IC, MIAMI 210 (U) NAM1-IC, MIAMI 250 (U) NAM1-IC, MIAMI XL EC 185 (U) NAM1-IC, PARIS 210 (U) NAM1-IC, PARIS EC 185 (U) NAM1-IC, SYDNEY EC 223 (U) NAM1-IC, SYDNEY XL 210 (U) NAM1-IC, IBIZA 145 (U) NAM1-R, IBIZA 210 (U) NAM1-R, MALTA 185 (U) NAM1-R, MIAMI XL EC 185 (U) NAM1-R, PARIS 210 (U) NAM1-R, MIAMI XL EC 185 (U) NAM1-R, PARIS 210 (U) NAM1-R, PARIS 210 (U) NAM1-R, SYDNEY XL 210 (U) NAM1-R.

Case Number 2020-023 Extension of Interim Waiver

I. Background and Authority

The Energy Policy and Conservation Act, as amended ("EPCA"),¹ authorizes DOE to regulate the energy efficiency of a number of consumer products and certain industrial equipment. (42 U.S.C. 6291–6317) Title III, Part C² of EPCA established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency for certain types of industrial equipment. This equipment includes Commercial Refrigerators, Freezers, and Refrigerator-Freezers (collectively "commercial refrigeration equipment" or "CRE"), the focus of this document. (42 U.S.C. 6311(1)(E))

The energy conservation program under EPCA consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

The Federal testing requirements consist of test procedures that manufacturers of covered equipment must use as the basis for: (1) certifying to DOE that their equipment complies with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6316(a); 42 U.S.C. 6295(s)), and (2) making representations about the efficiency of that equipment (42 U.S.C. 6314(d)). Similarly, DOE must use these test procedures to determine whether the

-

¹ All references to EPCA in this document refer to the statute as amended through the Infrastructure Investment and Jobs Act, Pub. L. 117-58 (Nov. 15, 2021).

² For editorial reasons, upon codification in the U.S. Code, Part C was redesignated as Part A-1.

equipment complies with relevant standards promulgated under EPCA. (42 U.S.C. 6316(a); 42 U.S.C. 6295(s))

Under 42 U.S.C. 6314, EPCA sets forth the criteria and procedures DOE is required to follow when prescribing or amending test procedures for covered equipment. EPCA requires that any test procedures prescribed or amended under this section must be reasonably designed to produce test results which reflect the energy efficiency, energy use or estimated annual operating cost of covered equipment during a representative average use cycle and requires that test procedures not be unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) The test procedure for CRE is contained in 10 CFR part 431, subpart C, appendix B - *Amended Uniform Test Method for the Measurement of Energy Consumption of Commercial Refrigerators, Freezers, and Refrigerator-Freezers* ("Appendix B").

Any interested person may submit a petition for waiver from DOE's test procedure requirements. 10 CFR 431.401(a)(1). DOE will grant a waiver from the test procedure requirements if DOE determines either that the basic model for which the waiver was requested contains a design characteristic that prevents testing of the basic model according to the prescribed test procedures, or that the prescribed test procedures evaluate the basic model in a manner so unrepresentative of its true energy or water consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 431.401(f)(2). DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. *Id*.

A petitioner may request that DOE extend the scope of a waiver or an interim waiver to include additional basic models employing the same technology as the basic model(s) set forth in the original petition. 10 CFR 431.401(g). DOE will publish any such extension in the *Federal Register*. *Id*.

II. Request for an Extension of Interim Waiver: Assertions and Determinations

On May 26, 2017, DOE issued an Interim Waiver in Case Number CR-006 granting AHT an interim waiver to test its AHT basic models specified in that interim waiver using an alternate test procedure. 82 FR 24330 ("May 2017 Interim Waiver").³ AHT stated that their basic models defrost less frequently than once every 24 hours. The DOE test procedure, by reference to ANSI/ASHRAE Standard 72–2005, "Method of Testing Commercial Refrigerators and Freezers" ("ASHRAE 72-2005"), requires beginning the test period at the start of a defrost cycle and recording data for 24 hours. AHT stated that the DOE test procedure would overstate the energy usage from the defrosting function. 82 FR 24330, 24335.

Based on its review, including the information provided by AHT, DOE initially determined that the current test procedure at Appendix B would evaluate the CRE basic models specified in the May 2017 Interim Waiver in a manner so unrepresentative of their true energy consumption characteristics as to provide materially inaccurate comparative data. *Id.* at 82 FR 24332-24333. The May 2017 Interim Waiver specifies that AHT must test and rate the subject basic models such that the energy consumption be determined using an equation that incorporates the energy consumption of two modified tests. The first modified test would be a 24-hour test without a defrost cycle starting in steady state conditions with eight hours of door openings. The second modified test would include a defrost cycle starting after steady state conditions are established and continuing until the defrost cycle recovery is complete. *Id.* at 82 FR 24333.

On January 20, 2022, AHT submitted a request to extend the scope of the interim waiver, Case Number 2022-002, to the specified additional AHT basic models.⁴ AHT stated that these basic models have the same characteristics as the models covered by the existing interim waiver.

³ In the May 2017 Interim Waiver DOE declined to grant AHT an interim waiver as it pertained to AHT's petition regarding multi-mode operation. 82 FR 24330, 24332. That denial is not relevant to AHT's request for an extension or this Order extending the interim waiver granted in the May 2017 Interim Waiver.

⁴ The specified basic models are: IBIZA 145 (U) NAM1-IC, IBIZA 210 (U) NAM1-IC, MALTA 185 (U) NAM1-IC, MANHATTAN XL 210 (U) NAM1-IC, MIAMI 210 (U) NAM1-IC, MIAMI 250 (U) NAM1-IC, MIAMI XL EC 185 (U) NAM1-IC, PARIS 210 (U) NAM1-IC, PARIS EC 185 (U) NAM1-IC, SYDNEY EC 223 (U) NAM1-IC, SYDNEY XL 210 (U) NAM1-IC, IBIZA 145 (U) NAM1-R, IBIZA 210 (U) NAM1-R, MALTA 185 (U)

DOE has reviewed AHT's interim waiver extension request and operating instructions for the subject basic models and determined that the CRE basic models identified in AHT's request incorporate the same design characteristics as those basic models covered under the interim waiver in Case Number CR-006 such that the test procedure evaluates these basic models in a manner that is unrepresentative of their actual energy use. For the same reasons set forth in the May 2017 Interim Waiver, DOE understands that the model lines identified in AHT's request are not capable of defrosting once every 24 hours as simulated by the DOE test procedure. *See* 82 FR 24330, 24332-24333. Accordingly, DOE is extending the interim waiver in Case Number CR-006 to the CRE basic models identified by AHT in its interim waiver extension request.

III. Order

After careful consideration of all the material submitted by AHT in this matter, it is **ORDERED** that:

(1) AHT must, as of the date of publication of this Extension of Interim Waiver in the *Federal Register*, test and rate the following AHT brand commercial refrigerator and commercial ice-cream freezer basic models with the alternate test procedure as set forth in paragraph (2):

Brand	Basic Model
AHT	IBIZA 145 (U) NAM1-IC
1-2-2	
AHT	IBIZA 210 (U) NAM1-IC
AHT	MALTA 185 (U) NAM1-IC
AHT	MANHATTAN XL 210 (U) NAM1-IC
AHT	MIAMI 210 (U) NAM1-IC
AHT	MIAMI 250 (U) NAM1-IC
AHT	MIAMI XL EC 185 (U) NAM1-IC
AHT	PARIS 210 (U) NAM1-IC
AHT	PARIS EC 185 (U) NAM1-IC
AHT	SYDNEY EC 223 (U) NAM1-IC

_

NAM1-R, MANHATTAN XL 210 (U) NAM1-R, MIAMI 210 (U) NAM1-R, MIAMI 250 (U) NAM1-R, MIAMI XL EC 185 (U) NAM1-R, PARIS 210 (U) NAM1-R, PARIS EC 185 (U) NAM1-R, SYDNEY EC 223 (U) NAM1-R, SYDNEY XL 210 (U) NAM1-R.

AHT	SYDNEY XL 210 (U) NAM1-IC
AHT	IBIZA 145 (U) NAM1-R
AHT	IBIZA 210 (U) NAM1-R
AHT	MALTA 185 (U) NAM1-R
AHT	MANHATTAN XL 210 (U) NAM1-R
AHT	MIAMI 210 (U) NAM1-R
AHT	MIAMI 250 (U) NAM1-R
AHT	MIAMI XL EC 185 (U) NAM1-R
AHT	PARIS 210 (U) NAM1-R
AHT	PARIS EC 185 (U) NAM1-R
AHT	SYDNEY EC 223 (U) NAM1-R
AHT	SYDNEY XL 210 (U) NAM1-R

(2) The alternate test procedure for the AHT basic models referenced in paragraph (1) of this Order is the test procedure for CRE prescribed by DOE at 10 CFR part 431, subpart C, appendix B, except the test period shall be selected as follows:

The first part of the test shall be a 24-hour test starting in steady-state conditions and including eight hours of door opening (according to ASHRAE Standard 72). The energy consumed in this test, *ET*1, shall be recorded.

The second part of the test shall be a defrost cycle, including any operation associated with a defrost. The start and end points of the defrost cycle test period shall be determined according to the instructions for consumer refrigerators and refrigerator-freezers outlined in 10 CFR part 430, subpart B, appendix A, section 4.2.1.1 (for cycling compressor systems) or section 4.2.1.2 (for non-cycling compressor systems). The energy consumed in this test, ET2, and duration, t_{DI} , shall be recorded.

Based on the measured energy consumption in these two tests, the daily energy consumption (DEC) in kWh shall be calculated as:

$$DEC = ET1 \times \frac{(1440 - t_{NDI})}{1440} + \frac{ET2}{3.5}$$

and

$$t_{NDI} = \frac{t_{DI}}{3.5}$$

Where:

DEC = daily energy consumption, kWh;

ET1 = energy consumed during the first part of the test, in kWh;

ET2 = energy consumed during the second part of the test, in kWh

 t_{NDI} = normalized length of defrosting time per day, in minutes;

 t_{DI} = length of time of defrosting test period, in minutes;

3.5 = time between defrost occurrences, in days; and

1440 = conversion factor, minutes per day.

- (3) *Representations*. AHT may not make representations about the energy use of a basic model listed in paragraph (1) of this Order for compliance, marketing, or other purposes unless that basic model has been tested in accordance with the provisions of paragraph (2) of this Order and such representations fairly disclose the results of such testing.
- (4) This Extension of Interim Waiver shall remain in effect according to the provisions of 10 CFR 431.401.
- (5) This Extension of Interim Waiver is issued on the condition that the statements, representations, and documentation provided by AHT are valid. If AHT makes any modifications to the defrost controls of these basic models, the interim waiver will no longer be valid and AHT will either be required to use the current Federal test method or submit a new application for a test procedure waiver. DOE may rescind or modify this Extension of Interim Waiver (and/or the underlying Order issued in Case Number CR-006) at any time if it determines the factual basis underlying the petition for extension of interim waiver (and/or the underlying Order issued in Case Number CR-006) is incorrect, or the results from the alternate test procedure are unrepresentative of a basic model's true energy consumption characteristics. 10

CFR 431.401(k)(1). Likewise, AHT may request that DOE rescind or modify the Extension of

Interim Waiver (and/or the underlying Order issued in Case Number CR-006) if AHT discovers

an error in the information provided to DOE as part of its petition, determines that the interim

waiver is no longer needed, or for other appropriate reasons. 10 CFR 431.401(k)(2).

(6) AHT remains obligated to fulfill all applicable requirements set forth at 10 CFR part

429.

Signing Authority

This document of the Department of Energy was signed on April 5, 2022, by Kelly J.

Speakes-Backman, Principal Deputy Assistant Secretary for Energy Efficiency and Renewable

Energy, pursuant to delegated authority from the Secretary of Energy. That document with the

original signature and date is maintained by DOE. For administrative purposes only, and in

compliance with requirements of the Office of the Federal Register, the undersigned DOE

Federal Register Liaison Officer has been authorized to sign and submit the document in

electronic format for publication, as an official document of the Department of Energy. This

administrative process in no way alters the legal effect of this document upon publication in the

Federal Register.

Signed in Washington, DC, on April 6, 2022.

Treena V. Garrett,

Federal Register Liaison Officer,

U.S. Department of Energy.